

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052068 A1

(51) International Patent Classification⁷: **C09C 1/00**,
C09K 11/08, C01B 19/00, C01G 33/00, 35/00, C03C
1/10, 4/02, C01G 19/00

(74) Agent: **WISHART, Ian, Carmichael**; Johnson Matthey
Technology Centre, Blounts Court, Sonning Common,
Reading RG4 9NH (GB).

(21) International Application Number:
PCT/GB2004/004794

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date:
15 November 2004 (15.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0326985.9 20 November 2003 (20.11.2003) GB

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **JOHN-
SON MATTHEY PUBLIC LIMITED COMPANY**
[GB/GB]; 2-4 Cockspur Street, Trafalgar Square, London
SW1Y 5BQ (GB).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **BOOTH, Jonathan,**
Charles, Shepley [GB/GB]; Johnson Matthey Technology
Centre, Blounts Court, Sonning Common, Reading RG4
9NH (GB). **DANN, Sandra, Elizabeth** [GB/GB]; Depart-
ment of Chemistry, Loughborough University, Loughbor-
ough LE11 3TU (GB). **O'BRIEN, Duncan, Lee, John**
[GB/GB]; Department of Chemistry, Loughborough Uni-
versity, Loughborough LE11 3TU (GB).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: **INORGANIC PIGMENTS**

(57) Abstract: An inorganic pigment, the pigment comprising a compound which is an oxysulphide or oxyselenide of tin and a metal chosen from niobium or tantalum. The pigments are brightly coloured in the colour range from yellow, through orange to red, and are especially suitable for the colouration of glass and plastic substrates. Methods for the production of the pigments are also described.

WO 2005/052068 A1